

AVIATION

JULY 16, 1923

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The new Navy fighting plane, now being issued to the Naval Aircraft Squadrons

VOLUME
XV

SPECIAL FEATURES

NUMBER
3

AN ITALIAN LIGHT PLANE
AVIATION AND CITY PLANNING
RESULTS OF NATIONAL BALLOON RACE
FOREIGN AIR ARMAMENTS AND THE UNITED STATES

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HIGHLAND, N. Y.
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AVIATION

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Aerial Armaments

THEIR should be great caution used in considering the conflict existing between France and England. The wide public is that in being given to it may have behind it a purpose if it is not apparent to the public.

Understanding there are not being emphasized. The first and most important is the growing conviction that the most economical form of warfare is in the air. The second point is, considered in the present military and naval context of all aircraft activities is practically all countries except England and Italy. Consequently there is a fear that the economical nature of aircraft will lead to divert the military and naval appropriations to the expansion of the air force.

It would that Admiral Fisher believes that "a bomb weighing 4,000 pounds with 2,000 pounds of T.N.T. would sink any battleship now built or likely to be built, if exploded within a few hundred feet of the hull" and Admiral Fisher states that power "dominates in naval warfare. Sea power is absolutely dependent upon air power. It can be successfully exerted only through the medium of air power," and these opinions are shared by the distinguished English Admiral Sir John Jellicoe. Admiral Moffet, Chief of the Bureau of Aeronautics of the Navy Department is aware of the changed conditions when he states that "aviation is dominating and controlling world conditions today. The overwhelming air force of France is enabling her to dictate terms. She is able to sweep German territory and hold it in defiance of the protest or action of any other power or power."

How we have been Admiral, of definitely stating that aviation is dominating future war and Admiral Moffet, when the subject of appropriations comes up, reveals the fact that only five per cent of the total naval budget is allowed for aviation. He says that of three hundred and forty million dollars allowed for maintenance of the Navy, Naval Aeronautics is allowed less than fifteen million. On this meager appropriation we have managed to struggle along and barely keep aviation afloat. Is it not evident that in naval circles there is a fear that the development of aircraft may have a disastrous effect on the navy-five per cent?

The standard naval opinion has been expressed by Rear Admiral William L. Rodgers, Head of the General Board and Senior Officer on the staff of the navy. Compare his statement with those above. He maintains the role of aircraft is to keep that "their importance upon which the public has followed in attention arises from their capacity from power to air other vessels. This importance is greatly reduced when they are opposed by equally speedy enemies. When both sides have aircraft the role of aircraft on both sides tends to be military only. Aircraft can be superior only when possessed by one side only."

Recently the Admiral has convinced himself that a "five per cent" naval air force that spends fifteen million dollars in

adequately to protect the American Navy against any enemy aircraft attack.

When the military point of view is considered, it is more difficult to secure expressed opinion. The statement recently issued in Washington that a recommendation has been made to greatly increase our military air force and have some continuing aircraft program is encouraging. But it will not meet American aviation if it is not considered in the light of economy. With a million dollars devoted next year to coast artillery, cavalry, ordnance or infantry give equal results to the same amount spent on aircraft. The hardest kind of war department head is to cut his appropriations. When those who improve the abundance of the army budget lack a vision of aerial warfare or are fearful of its development, the question of comparative economy becomes involved.

Economy has been the keynote of President Harding's administration. It is the policy of all nations now. Aircraft development should be considered from this viewpoint alone. Premier Baldwin has announced that "in conformity with our obligations under the Covenant of the League of Nations, the British Government would gladly co-operate with other Governments in limiting the strength of our armaments on lines similar to the Treaty of Washington in case of the navy, and any such arrangement, it is needless to say, will govern the policy of air extension."

Of course, from the standpoint of politics, it would be a great strength to meet any nation the economy of spending appropriations for aerial defense. But, until nations are willing to discuss the limitation of the size of standing armies and the amount of military stores the nations are contemplating, it appears to be only putting a mask across to lay such great stress on competition in aircraft.

When money is spent for military or naval equipment, it seldom is solely commercial development. With aircraft it is different. The great advance in speed, altitude, duration and power to airplanes while due to a desire to excel in the air, has made commercial aviation more profitable. Indeed, more were spent on developing military transportation. The entire amount of the appropriations for aircraft, while primarily for national defense, will be well invested if it advances the air when the advantages of air transport will be available to the entire country.

These facts cannot be too often reiterated. Economy of aerial warfare is certain to become a subject of wide discussion. Already attempts have been made to compare the cost of machine aviation with the cost of a fleet of warships, but these statistical gymnastics will not uphold the traditional view. The public, informed as to the comparative economy and efficiency of aircraft, and noting the remarkable growth of Europe's unbalanced commercial air services, will look with increasing approval upon an adequate American Air Force.

A Visit to the Looming Plant

Situated in the heart of Manhattan Island, almost midway between the two great railroad terminals of the Pennsylvania and New York Central, is the new plant of the Looming Aeronautical Engineering Corporation.

The factory, which is small as factories go, measures the visitor with its up-to-date and with the way everything has been carefully planned out so that there is no lost space. The plant is located in a specially constructed building and stands on the foot of East 11th Street. Special doors have been provided at the entry and exit which, when opened, give a clear space of 46 ft. in width and 28 ft. high, easily per-



View of the interior of the plant of the Looming Aeronautical Engineering Corp., at 11th St. and East River, New York City. Several Looming Air Yachts are shown in different stages of assembly. Note engine belt, on the right, leading from the overhead shaft to the main line.

mitting the Air Yacht, for which the company is rapidly building up a great reputation, to be brought out of the factory and launched in the East River over hundred feet distant.

The main floor houses the wing shop, metal and woodworking departments and assembly hall. On the second floor, between the offices and drafting room, is a complete motor overhaul shop, to which by means of hoists and hoists, engines are to be taken out or installed in planes without touching the main floor.

The accompanying illustration shows work on Looming Air Yachts which is the main work going on at present. The light in the factory, it will be noted, is especially good—brightest, running along the whole southern and western walls. Right of these flying boats have been built for the Army Air Service, which will use them for rapid communication with between Army posts in the Island Possessions of the New Looming Air Yacht, which will handle the fleet of the New York-Norfolk Air Service, Inc. (three have been completed, while the remaining two are being readied towards completion).

Our Growing Fuel Consumption

It is learned from the Department of the Interior that petroleum supplies of this country, in the immediate effort to supply demand for the nation's millions of interest, consuming engines, produced gasoline at the rate of 38,632,754 gal. per day during the month of April, establishing a new high record rate of daily production in the industry. The nation's stock of gasoline May 1 amounted to 1,355,417,891 gal., showing a new high record mark. This exceeds by 75,000,000 gal. the record for April 1, which had previously constituted a record.

Military Aviation in Mexico

The establishment of an independent air department is being considered by the Mexican Department of War and Marine. A bill to this effect which is to be introduced in the Mexican Congress next September, is being studied by the military authorities, and it is stated that President Obregon favors this measure.

At the present time the Mexican Air Force depends from the Department of War and Marine. Its main establishment is at Vallarta, near Mexico City, where fairly large air ships fitted with up to date machinery imported from the United States are maintained together with a flying school.

AIRPORTS AND AIRWAYS

This Department is concerned with all civil flying activities such as the establishment of airports, the making of airways, markings to direct aircraft observations, experience gathered on flying routes and landing fields, the work of commercial aviation companies and private fliers, the formation of new air transport enterprises, general progress of general interest, etc.

Communications in this effort, addressed "Airways Editor, Aviation, 225 Fourth Ave., New York City," should be brief, concise and to the point. They should deal with facts, not with theories or speculations. While American civil flying activities will naturally be given prominence, communications will also be welcomed from Canada, Mexico and other parts of the Western Hemisphere. EXCISE.

Chicago Notes

1. In 1931, formerly head of the Ralph C. Duggan Co. and its consolidation with the James Levy Aircraft Co. of Chicago, is now Vice President of the Chicago Air Club, and is in active charge of the latter's work.

2. Flying field and office of the Chicago Air Club Co. is at 41st Street and 14th Avenue, Chicago, where it occupies a detached building on a street car line in the city. The type comprised the erection of shops 12 to 34 ft. wide, a three story building, a shop building and separate building and office.

3. The company is conducting a general aviation business which includes flying instruction, passenger carrying, special emergency service, aerial photography and mapping. The facilities occupy 50 acres with several hundred acres of open land for expansion. The company is operating five shops and expects to increase this fleet in the near future.

4. The Aviation Club of Chicago recently held two meetings to discuss about a uniformity of rules for passenger carrying in airplanes. Some favors are asking 60 for the "top" of the aircraft still stick to the old \$30 rate.

5. The firm who have reduced their rates claim that they are getting more trade than making up the loss and all the more so making aviation more popular. Those still making \$10 claim they have to do it because they lose too much time in taking off and landing, and is waiting to many extra trips before the job of landing and waiting.

6. The next meeting of the Aviation Club of Chicago, which will be held the latter part of July, the question will be asked as to whether Henry Ford, if elected president, will make the United States first to fly.

7. Captain Skerper, who was on a flying tour of the neighboring states, has returned to Addison Field from Detroit to resume flying activities in Chicago. The flying club of Chicago has added a new ship to its equipment, which now consists of ten planes.

South Atlantic Aircraft Line

The Koppels commercial ship line which Spanish and South American airplanes propose to organize with German engineering and operating personnel is rapidly making headway. The financial progress of the company which has recently been made public in Madrid, provides the following: 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 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Army Orders

Order assigning Capt. Victor Parks, Jr. A.S. from Ft. Benning to Maxwell Field is revoked.

Major John B. Hawkins, A.S. relieved from duty at 1st Air Cavalry, Borden; assigned to Portland School, Langley Field, as stated.

First Lieut. Robert E. Self, A.S. relieved from duty at Crane Field, assigned to duty in Philippines Dept. to and dated Sept. 23, 1952.

First Lieut. Charles F. Talbot, A.S. relieved as assistant professor at University of Illinois, Urbana, Ill.; assigned to the Hawaiian Dept. to and for Honolulu about Sept. 26, 1952.

Capt. Donald F. Shaw, A.S. relieved from duty with Coy. B, 1st Cavalry, assigned to duty with Hawaiian Dept. to and for about Aug. 28, 1952.

The following Air Service officers are transferred from the continental United States to the Hawaiian Dept.: Capt. Hugh S. Alexander, Jr., W. H. Lewis, Thomas M. Sherrill, D. M. Mays, Henry E. Woodhouse, William K. Moran, Louis C. Mallory, Charles L. Chennell, Harold E. Clark, Albert F. Greenhouse, Carl B. Fyfe, Charles W. Cummings, Guy L. McKel, Paul C. Wilcox, Oscar Mendenhall, Henry W. Kitzler, Sam Lewis, Fred C. Finkhauer, Cyril W. Greyhul.

Assignment of Capt. Allan G. Gifford, A.S. was accepted by the President.

Transferred to Air Service for appointment as Flying Cadet, in Scott Field, Peir, Lt. Col. Otto Wernick, S. C. G. Field, Capt. John W. Lewis, W. H. Lewis, M. D. G. Field, 1st Lt. Paul H. Moore, 1st Lt. and 1st Lt. John J. Bower.

Capt. Harvey S. Martin, A. S. Langley Field, to Scott Field for appointment as Flying Cadet.

Letter of absence of one month is granted to Maj. John G. Gifford, A. S.

Maj. John C. McInerney, A. S. referred as assistant professor of mathematics and physics, St. E. University, Mass., assigned to duty in Philippines Dept., to and for Hawaii about Sept. 22, 1952, from San Francisco.

Maj. George L. Lovell, Jr., S. E. relieved from duty at Bolling Field, D. C. upon arrival of Maj. William R. Gifford, A. S. assigned to duty in Hawaiian Dept., to and for Hawaii about Aug. 4, 1952, from San Francisco.

Howard Miller, Jr., repeated at second lieutenant, Air Service from civil list, assigned to duty at Brooks Field, Tex.

First Lieut. John B. Patrick, A. S. referred as assistant professor in military science and tactics, University of California, and temporary duty at Crane Field, assigned to duty at Ft. Benning.

Capt. George S. Warner, A. S. relieved from duty at Langley Field, assigned to Scott Field after completion of summer training course at Ft. Benning, N. C.

First Lieut. John B. Patrick, A. S. from Panama Canal Dept. to Kelly Field, Tex.

Capt. Robert H. Henson, 1st Lt. from Sgt. A. S. Kelly Field, Tex. to Panama Canal Dept.

Following related new work to Brooks Field, Tex. for appointment as Flying cadets: Corp. Michael Amodeo and Private Fred R. Smith, both from Langley Field, W. D. G. Gifford Field, Peir, Dewey A. Borden and Isaac L. Wolf, Group Field, Peir, Harold D. Johnson, Langley Field; Private Alexander E. Gifford and Ted Moody, Maxwell Field.

First Lieut. Francis George Kane, S. E. transferred to Coast Artillery Corps and relieved from duty at Brooks Field, Tex.

Letter of absence of one month and fifteen days is granted to First Lieut. Henry Aiken, A. S.

Maj. John A. Pappalardo, A. S. from Scott Field, Ill.; designated as commander of 1st Air Cavalry and 1st Air Cavalry, Borden, assigned to duty at 1st Air Cavalry, Borden, N. C.

Letter of absence of two months is granted to First Lieut. Paul S. Borden, A. S.

First Lieut. Warren B. Gifford, A. S. relieved from duty as student at A. S. Technical School, to Scott Field.

First Lieut. George F. Farris, A. S. from Scott Field, Borden, referred to reserve. This is a temporary assignment.

Placed upon retired list, 1st Lieut. John J. Devine, 1st Air Cavalry, Langley Field, Staff Sgt. Edwin E. Taylor, 1st Air Cavalry, Borden.

U. S. NAVAL AVIATION

Orders to Officers

1st. (Lt.) Everett Ketchum, USN — Detached Air-Sea Rescue, Borden, assigned to duty at Naval Air Station, Pensacola, Fla.

1st. James E. Houston, USN — Detached Naval Air Station, Borden, assigned to duty at Naval Air Station, Pensacola, Fla.

1st. Herbert V. Parnes, USN — Detached Air-Sea Rescue, Borden, assigned to duty at Naval Air Station, Pensacola, Fla.

1st. Andrew S. Lamm, USN — Detached R. Base, Borden, assigned to duty at Naval Air Station, Pensacola, Fla.

1st. Claude Harold R. Keller, USN — Detached R. Base, Borden, assigned to duty at Naval Air Station, Pensacola, Fla.

1st. (Lt.) William S. Johnson, USN — Detached U.S. Navy, Borden, assigned to duty at Naval Air Station, Pensacola, Fla.

1st. (Lt.) John S. Johnson, USN — Detached U.S. Navy, Borden, assigned to duty at Naval Air Station, Pensacola, Fla.

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Miscellaneous Notes

Commander A. C. Reed in visiting the Department to get all available information on latest developments and plans, and in reviewing the War College plans pertaining to the Navy.

On Thursday, June 14, regular mail trips with the DT4 airplane were suspended. The plane was used for mail delivery and the T2 engine installed in this plane has been used for mail delivery.

The engine in this plane has had forty-five hours of operation in the past week. The engine is now being used for mail delivery and the T2 engine installed in this plane has been used for mail delivery.

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Ruleless, Lands Safety

One of the most daring and spectacular landings in the history of flying was performed last week at Hampton Roads, where the aircraft carrier USS *Intrepid*, under command of Capt. John S. McCain, Jr., landed on the water after being damaged by a fire on board.

The aircraft carrier *Intrepid* was damaged by a fire on board, which started in the engine room. The fire spread rapidly and the ship was forced to abort its mission and return to port.

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COMING AERONAUTICAL EVENTS

DOMESTIC

Oct. 1-3 — National Aeronautics Show, St. Louis, Mo.

Nov. 1 — Curtis Martin Flying Trophy Race

FOREIGN

July 23 — International Aero Exhibition, Copenhagen, Denmark

Aug. 2 — Berlin, Germany

Aug. 5 — Berlin, Germany

Aug. 10 — Berlin, Germany

Aug. 15 — Berlin, Germany

Aug. 20 — Berlin, Germany

Aug. 25 — Berlin, Germany

Aug. 30 — Berlin, Germany

Sept. 5 — Berlin, Germany

Sept. 10 — Berlin, Germany

Sept. 15 — Berlin, Germany

Sept. 20 — Berlin, Germany

Sept. 25 — Berlin, Germany

Sept. 30 — Berlin, Germany

Oct. 5 — Berlin, Germany

Oct. 10 — Berlin, Germany



Trade Mark

"A Battle Ship Mast 10,000 Feet High"—

is the designation that has been given to the Navy M01 all-metal airplane, a product of the Glenn L. Martin organization.

The development of this plane, of which six have been built for experimental purposes, called for an unusual amount of research work because of the many really new features in its design

and construction.

But the fact that it has passed the many and exhaustive Navy tests and that thirty-eight additional machines of this design have been ordered, speaks volumes for the utility and correctness of this new creation in aeronautics, as well as for the ability and progressiveness of the organization responsible for it.

THE GLENN L. MARTIN COMPANY

Cleveland

Builders of Quality Aircraft since 1909